

What is Claimed:

1. A composite material having metal at the surface of a resin base, obtained by subjecting the surface of a resin base to an ion exchange group introduction treatment, treating the surface of said resin base with liquid containing metal ions to introduce metal ions, and then reducing said metal ions, said composite material being characterized in that the resin base and metal of said composite material are hot-pressed.
2. The composite material according to Claim 1, wherein the ion exchange group introduction treatment is carried out by plasma treatment or ion exchange group introduction agent treatment.
3. The composite material according to Claim 1 or 2, wherein the binding strength between the resin base and metal is 5 N/cm or greater.
4. The composite material according to any one of Claims 1-3, wherein the metal is a metal selected from V, Cr, Mn, Fe, Co, Ni, Cu, Ga, As, Se, Mo, Ru, Rh, Pd, Ag, Cd, In, Sb, Te, Os, Ir, Pt, Au, Hg, Pb, Bi and alloys thereof.
5. The composite material according to any one of Claims 1-4, characterized in that hot-pressing is carried out under conditions of a temperature of 100-300°C, a pressure of 490-2450 N/cm<sup>2</sup> and a time of 5-30 min.
6. A composite material, obtained by subjecting the composite material of any of Claims 1-5 to an additional plating treatment.
7. The composite material according to any one of Claims 1-6, wherein the composite material is subjected to the plating treatment prior to hot-pressing.
8. A method for forming a composite material with improved binding strength between resin base and metal, which comprises (1) a process wherein the resin base surface is subjected to an ion exchange group introduction treatment, (2) the surface of said resin base is treated with liquid containing metal ions in order to introduce metal ions, (3) a process wherein said metal ions are reduced and a composite material having metal at the surface of the resin base is formed, and (4) a process wherein the metal and resin base of said composite material are hot-pressed.
9. The method for forming the composite material according to Claim 8, characterized in that the composite material is subjected to the plating treatment after process (3) and/or after process (4).